



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,051	12/19/2001	Hiroyuki Matsui	070639-0137	9805

22428 7590 06/28/2005

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
----------	--------------

2134

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,051

Applicant(s)

MATSUI, HIROYUKI

Examiner

Peter Poltorak

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-8 have been examined.

#### *Priority*

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on December 20, 2000.

#### *Drawings*

3. The drawings are objected to because the specification referring to Fig. 1 suggests that radio terminal 120 comprise a collator 105 (*pg. 9 line 2 and 4*). However, according to Fig. 1 the collator is only part of the PC 100.
4. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

Art Unit: 2134

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Abstract***

5. The abstract of the disclosure is objected to because of the phrase: "... ends the operating system working in the PC 100" is not understood. The examiner suggests substituting the phrase with some more clear language, e.g. "ends operation of the operating system in the PC 100".

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
7. The specification provides no guidance on how a computer is visually ascertained, especially in regard to the features claimed in claims 1, 3, 5-8.
8. Claims 2 and 4 are rejected by virtue of their dependence.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.
10. In claims 1-8 "radio" and "radio transmission" lack antecedent basis.
11. Claims 1, 3, 5-8 recite limitations associated with a visual position ascertainment. For example claim 1 recites as follows: "... ID code cannot be transmitted over a distance where the status of said personal computer can be visually ascertained from the position of said terminal's side transmitter/receiver". The meaning of the limitation is not clear and as discussed above, the specification provides no guidance in regard to the claimed feature. For purposes of further examination the examiner considers that the purpose of the limitation is essentially to emphasize inability of the terminal's side transmitter/receiver to receive an ID code due to the distance between the PC and the terminal.
12. A term: "ID code" is used throughout the claim language (*claims 1-8*) with use of various articles that proceed each term. Articles "the" and "a" are used; however, the use of the articles is inconsistent and as a result it is difficult to follow applicant's invention in relation to the recited "ID code". In other words it is not clear for example whether applicant's invention relates to use of only one instance of ID code consisting of two copies: one kept on a PC and the second identical is kept on a portable terminal, or whether there are different

ID codes for the communication initiated by the PC and for the communication initiated by the portable terminal.

For example, consider claim 3: a PC comprises a holder to store an ID code, a transmitter for transmitting an ID code, collator for collating the ID code.

The terminal comprises a holder for *storing said ID code* ("said" presumably referring to the ID code received from the PC) collator for collating an ID code transmitted by said PC and an ID code stored in said terminal's holder.

13. The following claim 4 further complicates the matter by referring to encoding an ID code stored in said PC's holder. Even if applicant's attempt is to generalize the steps of the claimed invention so that one understands that a holder can store an ID code, transmitter can transmit an ID code and collator can collate an ID code, the claim language as cited is inconsistent results in more ambiguity.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Xydis (U.S. Patent No. 6307471)* in view of *Stallings (William Stallings,*

*"Cryptography and network security", 2th edition, 1998, ISBN: 0138690170)*

in further view of *Doub et al. (U.S. Patent No. 6594762)*.

15. As per claims 1, 3 and 5-8, as best understood, *Xydis* teaches wireless communication wherein one of the communication devices is a personal computer 14 and another is a portable terminal 12 (*Fig. 3*).

A signal 10 containing data (*ID code*) is sent from a portable terminal (*token 12, col. 2 lines 31-33*) and a personal computer (*14, Fig. 2*) emits a signal 10' (*col. 2 lines 33-34*).

Both devices comprise a transmitter/receiver (*antennas 18 and 19*) that receive and emit the signals (*col. 2 lines 43-65*).

*Xydis* teaches that upon receiving a signal the PC's processor compares data of the signal to a user code database and that PC gets disabled if the signal fails to match (*col. 3 line 38- col. 4 line 12*).

16. The limitation of the portable terminal having a radio transmission power with which the data signal cannot be transmitted over some distance is implicit since the strength of the signal diminishes as distance between the devices increases.

17. *Xydis* teaches the authentication of the terminal device that is associated with the user, but does not disclose authentication of the PC to the portable terminal (*PC sending the data signal to the portable device and the portable device verifying the data against the database*).

18. However, mutual authentication is old and well-known practice as illustrated by *Stallings (Stallings, Mutual Authentication, pg. 303)* and it would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to configure the PC and the portable terminal, so that the data signal sent from the PC could be authenticated against the data held in the portable terminal. One of ordinary skill in the art at the time of applicant's invention would have been motivated to implement such a modification in order to increase security by enabling both communicating parties to mutually satisfy each other's identity.

19. *Xydis* also does not teach that the PC waits for a matching ID code for only a predetermined time period before interrupting the operation of the operating system.

20. *Doub et al.* teach that the PC waits for a matching ID code only for a predetermined time period before the PC operation is interrupted (*Doub et al.*, col. 3 line - 62 col. 4 line 16).

21. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to disable configuration of the PC to wait for a matching ID code only for predetermined time. One of ordinary skill in the art would have been motivated to perform such a modification in order to prevent unauthorized parties from attacking the system.

22. As per claims 3, 5 *Xydis* does not teach that the PC and the portable terminal comprise an encipher and a decoder and do not teach encoding and decoding the ID code.

23. However, encrypting and decoding of sensitive data (*such as authenticating data*) is well known in the art as illustrated by *Stallings* (*Stallings*,



Art Unit: 2134

*Conventional encryption model*, pg. 22). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include an encipher and a decoder in both the PC and the portable terminal and encode/decode communicated ID code. One of ordinary skill in the art would have been motivated to perform such a modification in order to ensure confidentiality and increase system's security.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Pub. 5392355

U.S. Pub. 5883960

U.S. Pub. 5077790

U.S. Pub. 5239294


U.S. Pub. 5821854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Signature  
6/24/05  
Date

David Y. Jung  
Primary Examiner

6/25/05  
